405 KAR 16:001. Definitions for 405 KAR Chapter 16.

RELATES TO: KRS Chapter 350, 7 C.F.R. Part 657, 30 C.F.R. Parts 700.5, 701.5, 707.5, 730-733, 735, 761.5, 762.5, 773.5, 800.5, 843.5, 917c, 30 U.S.C. Chapter 25, 1253, 1255, 1291

STATUTORY AUTHORITY: KRS 350.028(1), (5), 350.465, 30 C.F.R. Parts 730-733, 735, 917, 30 U.S.C. 1253, 1255

NECESSITY, FUNCTION, AND CONFORMITY: KRS 350.028(1), (5) and 350.465(2) authorize the cabinet to promulgate administrative regulations relating to surface and underground coal mining operations. This administrative regulation defines terms used in 405 KAR Chapter 16.

Section 1. Definitions. (1) "Acid drainage" means water with a pH of less than six and zerotenths (6.0) and in which total acidity exceeds total alkalinity, discharged from an active, inactive, or abandoned surface coal mine and reclamation operation or from an area affected by surface coal mining and reclamation operations.

- (2) "Acid-forming materials" means earth materials that contain sulfide minerals or other materials which, if exposed to air, water, or weathering processes, form acids that could create acid drainage.
- (3) "Acquisition" means purchase, lease, or option of land for the purpose of conducting or allowing through resale, lease, or option, the conduct of surface coal mining and reclamation operations.
- (4) "Adjacent area" means land located outside the affected area or permit area, depending on the context in which "adjacent area" is used, where air, surface or groundwater, fish, wild-life, vegetation, or other resources protected by KRS Chapter 350 could be adversely impacted by surface coal mining and reclamation operations.
- (5) "Affected area" means any land or water area that is used to facilitate, or is physically altered by, surface coal mining and reclamation operations. The affected area includes:
 - (a) The disturbed area;
 - (b) Any area upon which surface coal mining and reclamation operations are conducted;
- (c) Any adjacent lands the use of which is incidental to surface coal mining and reclamation operations;
- (d) All areas covered by new or existing roads used to gain access to, or for hauling coal to or from, surface coal mining and reclamation operations, except as established in this definition;
- (e) Any area covered by surface excavations, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, or shipping areas;
- (f) Any areas upon which are sited structures, facilities, or other property or material on the surface resulting from, or incident to, surface coal mining and reclamation operations;
- (g) The area located above underground workings associated with underground mining activities;
 - (h) auger mining or in situ mining; and
- (i) Every road used for the purposes of access to, or for hauling coal to or from, surface coal mining and reclamation operations, unless the road:
- 1. Was designated as a public road pursuant to the laws of the jurisdiction in which it is located:
- 2. Is maintained with public funds and constructed in a manner similar to other public roads of the same classification within the jurisdiction; and

- 3. There is substantial (more than incidental) public use.
- (6) "Applicant" means any person seeking a permit, permit revision, permit amendment, permit renewal, or transfer, assignment, or sale of permit rights from the cabinet to conduct surface coal mining and reclamation operations or approval to conduct coal exploration operations pursuant to KRS Chapter 350 and 405 KAR Chapters 7 through 24.
- (7) "Application" means the documents and other information filed with the cabinet seeking issuance of permits; revisions; amendments; renewals; and transfer, assignment, or sale of permit rights for surface coal mining and reclamation operations or, if required, seeking approval for coal exploration.
 - (8) "Approximate original contour" is defined by KRS 350.010.
- (9) "Aquifer" means a zone, stratum, or group of strata that can store and transmit water in sufficient quantities for domestic, agricultural, industrial, or other beneficial use.
- (10) "Auger mining" means a method of mining coal at a cliff or highwall by drilling holes into an exposed coal seam from the highwall and transporting the coal along an auger bit to the surface and includes all other methods of mining in which coal is extracted from beneath the overburden by mechanical devices located at the face of the cliff or highwall and extending laterally into the coal seam, such as extended depth and secondary recovery systems.
- (11) "Best technology currently available" means equipment, devices, systems, methods, or techniques that will prevent, to the extent possible, additional contributions of suspended solids to stream flow or runoff outside the permit area and minimize, to the extent possible, disturbances and adverse impacts on fish, wildlife, and related environmental values, and achieve enhancement of those resources if practicable. The term includes equipment, devices, systems, methods, or techniques that are currently available anywhere as determined by the cabinet, even if they are not in routine use. The term includes construction practices, siting requirements, vegetative selection and planting requirements, animal stocking requirements, scheduling of activities and design of sedimentation ponds in accordance with 405 KAR Chapters 16 and 18. The cabinet determines the best technology currently available as authorized by KRS Chapter 350 and 405 KAR Chapters 7 through 24.
- (12) "Blaster" means a person who is directly responsible for surface blasting operations in surface coal mining and reclamation operations or coal exploration operations.
- (13) "Bond pool" or "Kentucky Bond Pool" means the voluntary alternative bonding program established at KRS 350.700 through 350.755.
 - (14) "Cabinet" is defined by KRS 350.010.
 - (15) "C.F.R." means Code of Federal Regulations.
- (16) "Coal" means combustible carbonaceous rock, classified as anthracite, bituminous, subbituminous, or lignite by ASTM Standard D 388-77.
 - (17) "Coal exploration" means the field gathering of:
- (a) Surface or subsurface geologic, physical, or chemical data by mapping, trenching, drilling, geophysical, or other techniques necessary to determine the quality and quantity of overburden and coal of an area; or
- (b) Environmental data to establish the conditions of an area before beginning surface coal mining and reclamation operations pursuant to the requirements of 405 KAR Chapters 7 through 24 if the activity could cause any disturbance of the land surface or any appreciable effect upon land, air, water, or other environmental resources.
 - (18) "Coal mine waste" means coal processing waste and underground development waste.
- (19) "Coal processing waste" means materials that are separated from the product coal during the cleaning, concentrating, or other processing or preparation of coal.
- (20) "Collateral bond" means an indemnity agreement in a sum certain payable to the cabinet executed by the permittee and that which is supported by the deposit with the cabinet of

cash, negotiable certificates of deposit, or an irrevocable letter of credit of any bank organized and authorized to transact business in the United States.

- (21) "Combustible material" means organic material that is capable of burning, either by fire or through oxidation, accompanied by the evolution of heat and a significant temperature rise.
- (22) "Compaction" means increasing the density of a material by reducing the voids between the particles by mechanical effort.
- (23) "Cropland" means land used for the production of adapted crops for harvest, alone or in a rotation with grasses and legumes, and includes row crops, small grain crops, hay crops, nursery crops, orchard crops, and other similar specialty crops.
- (24) "Cumulative impact area" means the area, including the permit area, within which impacts resulting from the proposed operation could interact with the impacts of all anticipated mining on surface and groundwater systems. Anticipated mining includes, at a minimum, the entire projected lives through bond release of:
 - (a) The proposed operation;
 - (b) All existing operations;
 - (c) Any operation for which a permit application has been submitted to the cabinet; and
- (d) All operations required to meet diligent development requirements for leased federal coal for which there is actual mine development information available.
 - (25) "Day" means calendar day unless otherwise specified to be a working day.
 - (26) "dB" means decibels.
 - (27) "Department" means the Department for Natural Resources.
- (28) "Developed water resources land" means land used for storing water for beneficial uses such as stockponds, irrigation, fire protection, flood control, and water supply.
- (29) "Disturbed area" means an area where vegetation, topsoil, or overburden is removed or upon which topsoil, spoil, coal processing waste, underground development waste, or noncoal waste is placed by surface coal mining operations. Those areas are classified as "disturbed" until reclamation is complete and the performance bond or other assurance of performance required by 405 KAR Chapter 10 is released.
- (30) "Diversion" means a channel, embankment, or other manmade structure constructed to divert water from one (1) area to another.
- (31) "Downslope" means the land surface below the projected outcrop of the lowest coalbed being mined along each highwall.
 - (32) "Durable rock" means rock that:
 - (a) Does not slake in water;
- (b) Is not reasonably expected to degrade to a size or condition that will block, cause failure of, impair, or restrict the effectiveness of the internal drainage system; and
- (c) Has been demonstrated to have a slake durability index value of ninety (90) or greater as determined by:
 - 1. The Method of Determination of Slake Durability Index (Kentucky Method 64-513-79); or
- 2. A test method that yields an equivalent measure of durability based upon correlation of results with Kentucky Method 64-513-79.
- (33) "Embankment" means a manmade deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water; to support roads or railways; or for other similar purposes.
- (34) "Ephemeral stream" means a stream that flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice, and that has a channel bottom that is always above the local water table.
 - (35) "Excess spoil":
 - (a) Means spoil disposed of in a location other than the coal extraction area; and

- (b) Does not mean spoil material used to achieve the approximate original contour.
- (36) "Fish and wildlife land use", as used in 405 KAR 16:210 and in similar situations when referring to a premining or postmining land use, means land dedicated wholly or partially to the production, protection, or management of fish or wildlife. Areas considered as having the fish and wildlife land use are typically characterized by a diversity of habitats in which use by wildlife is the dominant characteristic, whether actively managed or not.
- (37) "Forest land" means land used or managed for the long term production of wood, wood fiber, or wood derived products.
- (38) "Fugitive dust" means that particulate matter that becomes airborne due to wind erosion from exposed surfaces.
- (39) "Ground cover" means the area of ground covered by the combined aerial parts of vegetation and litter produced and distributed naturally and seasonally on site, expressed as a percentage of the total area of measurement.
- (40) "Groundwater" means subsurface water that fills available openings in rock or soil materials to the extent that they are considered water saturated.
- (41) "Growing season" means the period during a one (1) year cycle, from the last killing frost in the spring to the first killing frost in the fall, in which climatic conditions are favorable for plant growth. In Kentucky, this period normally extends from mid-April to mid-October.
- (42) "Head-of-hollow fill" means a fill structure consisting of any material, other than coal processing waste and organic material, placed in the uppermost reaches of a hollow near the approximate elevation of the ridgeline, where there is no significant natural drainage area above the fill, and where the side slopes of the existing hollow measured at the steepest point are greater than twenty (20) degrees or the average slope of the profile of the hollow from the toe of the fill to the top of the fill is greater than ten (10) degrees.
- (43) "Higher or better uses" means postmining land uses that have a higher economic value or nonmonetary benefit to the landowner or the community than the premining land uses.
- (44) "Highwall" means the face of exposed overburden and coal in an open cut of a surface mining activity or for entry to underground mining activities.
- (45) "Highwall remnant" means that portion of highwall that remains after backfilling and grading of a remining permit area.
 - (46) "Historically used for cropland" means land that:
- (a) Has been used for cropland for any of five (5) years or more of the ten (10) years immediately preceding the:
 - 1. Application; or
- 2. Acquisition of the land for the purpose of conducting a surface coal mining and reclamation operation;
- (b) Would likely have been used for cropland for any five (5) of the ten (10) years immediately preceding the acquisition or application, but for some fact of ownership or control of the land unrelated to the productivity of the land; or
- (c) Falls outside the five (5) of ten (10) years criteria, but the cabinet determines is clearly cropland on the basis of additional cropland history of:
 - 1. Surrounding land; and
 - 2. The land under consideration.
- (47) "Hydrologic balance" means the relationship between the quality and quantity of water inflow to, water outflow from, and water storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake, or reservoir. It encompasses the dynamic relationship between precipitation, runoff, evaporation, and changes in ground and surface water storage.
 - (48) "Hz" means hertz.
 - (49) "Imminent danger to the health and safety of the public" means the existence of any

condition or practice, or any violation of a permit or other requirements of KRS Chapter 350, in a surface coal mining and reclamation operation, which could reasonably be expected to cause substantial physical harm to persons outside the permit area before the condition, practice, or violation can be abated. A reasonable expectation of death or serious injury before abatement exists if a rational person, subjected to the same condition or practice giving rise to the peril, would avoid exposure to the danger during the time necessary for abatement.

- (50) "Impounding structure" means a dam, embankment, or other structure used to impound water, slurry, or other liquid or semiliquid material.
- (51) "Impoundment" means a water, sediment, slurry, or other liquid or semiliquid holding structure or depression, either naturally formed or artificially built.
 - (52) "Industrial/commercial lands" means lands used for:
- (a) Extraction or transformation of materials for fabrication of products, wholesaling of products, or long-term storage of products, and heavy and light manufacturing facilities; or
- (b) Retail or trade of goods or services, including hotels, motels, stores, restaurants, and other commercial establishments.
 - (53) "In situ process" means:
 - (a) In situ gasification;
 - (b) In situ leaching;
 - (c) Slurry mining;
 - (d) Solution mining;
 - (e) Borehole mining;
 - (f) Fluid recovery mining; or
 - (g) Another activity conducted on the surface or underground in connection with:
 - 1. In-place distillation;
 - 2. Retorting;
 - 3. Leaching; or
 - 4. Chemical or physical processing of coal.
 - (54) "Intermittent stream" means:
- (a) A stream or reach of stream that drains a watershed of one (1) square mile or more but does not flow continuously during the calendar year; or
- (b) A stream or reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface runoff and groundwater discharge.
 - (55) "KAR" means Kentucky administrative regulations.
 - (56) "KPDES" means Kentucky Pollutant Discharge Elimination System.
 - (57) "KRS" means Kentucky Revised Statutes.
- (58) "Land use" means specific functions, uses, or management-related activities of an area, and could be identified in combination if joint or seasonal uses occur and could include land used for support facilities that are an integral part of the use. In some instances, a specific use can be identified without active management.
 - (59) "Modified highwall" means either:
 - (a) The highwall resulting from remining where the preexisting highwall face is removed; or
- (b) The highwall resulting from remining where the preexisting highwall is vertically enlarged.
- (60) "Monitoring" means the collection of environmental data by either continuous or periodic sampling methods.
 - (61) "MRP" means mining and reclamation plan.
 - (62) "MSHA" means Mine Safety and Health Administration.
- (63) "Mulch" means vegetation residues or other materials that aid in soil stabilization and soil moisture conservation, thus providing microclimatic conditions suitable for germination and

growth.

- (64) "Notice of noncompliance and order for remedial measures" means a written document and order prepared by an authorized representative of the cabinet that sets forth with specificity the violations of KRS Chapter 350, 405 KAR Chapters 7 through 24, or permit conditions that the authorized representative of the cabinet determines to have occurred based upon inspection, and the necessary remedial actions, if any, and the time schedule for completion thereof, which the authorized representative deems necessary and appropriate to correct the violations.
 - (65) "Operations" is defined by KRS 350.010.
 - (66) "Operator" is defined by KRS 350.010.
- (67) "Order for cessation and immediate compliance" means a written document and order issued by an authorized representative of the cabinet when:
- (a) A person to whom a notice of noncompliance and order for remedial measures was issued has failed, as determined by a cabinet inspection, to comply with the terms of the notice of noncompliance and order for remedial measures within the time limits set therein, or as subsequently extended; or
- (b) The authorized representative finds, on the basis of a cabinet inspection, any condition or practice or any violation of KRS Chapter 350, 405 KAR Chapters 7 through 24, or any condition of a permit or exploration approval that:
 - 1. Creates an imminent danger to the health or safety of the public; or
- 2. Is causing or can reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources.
- (68) "OSM" means Office of Surface Mining Reclamation and Enforcement, United States Department of the Interior.
- (69) "Other treatment facilities" means any chemical treatments, such as flocculation or neutralization, or mechanical structures, such as clarifiers or precipitators, that have a point source discharge and are utilized:
- (a) To prevent additional contributions of dissolved or suspended solids to streamflow or runoff outside the permit area; or
 - (b) To comply with 405 KAR 16:070.
- (70) "Outslope" means the face of the spoil or embankment sloping downward from the highest elevation to the toe.
 - (71) "Overburden" is defined by KRS 350.010.
- (72) "Pastureland" means land used primarily for the long-term production of adapted, domesticated forage plants to be grazed by livestock or occasionally cut and cured for livestock feed.
 - (73) "Perennial stream":
- (a) Means a stream or that part of a stream that flows continuously during all of the calendar year as a result of groundwater discharge or surface runoff; and
 - (b) Does not mean "intermittent stream" or "ephemeral stream."
- (74) "Performance bond" means a surety bond, a collateral bond, or a combination thereof, or bonds filed pursuant to the provisions of the Kentucky Bond Pool Program (405 KAR 10:200, KRS 350.595, and KRS 350.700 through 350.755), by which a permittee assures faithful performance of all the requirements of KRS Chapter 350, 405 KAR Chapters 7 through 24, and the requirements of the permit and reclamation plan.
- (75) "Permanent diversion" means a diversion remaining after surface coal mining and reclamation operations are completed that has been approved for retention by the cabinet and other appropriate Kentucky and federal agencies.
 - (76) "Permit" means written approval issued by the cabinet to conduct surface coal mining

and reclamation operations.

- (77) "Permit area" means the area of land, indicated on the approved map submitted by the permittee with an application, required to be covered by the permittee's performance bond pursuant to 405 KAR Chapter 10 and that shall include the area of land upon which the permittee proposes to conduct surface coal mining and reclamation operations pursuant to the permit, including all disturbed areas. Areas adequately bonded under another valid permit, pursuant to 405 KAR Chapter 10, could be excluded from the permit area.
- (78) "Permittee" means an operator or a person holding or required by KRS Chapter 350 or 405 KAR Chapters 7 through 24 to hold a permit to conduct surface coal mining and reclamation operations during the permit term and until all reclamation obligations required by KRS Chapter 350 and 405 KAR Chapters 7 through 24 are satisfied.
 - (79) "Person" is defined by KRS 350.010.
- (80) "Precipitation event" means a quantity of water resulting from drizzle, rain, snowmelt, sleet, or hail in a specified period of time.
- (81) "Previously mined area" means land that was affected by coal mining operations conducted prior to August 3, 1977, that has not been reclaimed to the standards of this title.
- (82) "Prime farmland" means those lands that are defined by the Secretary of Agriculture in 7 C.F.R. 657 and that have been "historically used for cropland" as that phrase is defined in this administrative regulation.
- (83) "Probable hydrologic consequences" means the projected results of proposed surface coal mining and reclamation operations which may reasonably be expected to change the quantity or quality of the surface and groundwater; the surface or groundwater flow, timing, and pattern; and the stream channel conditions on the permit area, shadow area, and adjacent areas.
- (84) "Public building" means any structure that is owned or leased, and principally used by a governmental agency for public business or meetings.
 - (85) "Public road" means any publicly owned thoroughfare for the passage of vehicles.
 - (86) "RAM" means Reclamation Advisory Memorandum.
- (87) "Reasonably available spoil" means spoil and suitable coal mine waste material generated by the remining operation and other spoil or suitable coal mine waste material located in the permit area that is accessible and available for use and that when rehandled will not cause a hazard to public safety or significant damage to the environment. For this purpose, the permit area includes all spoil of this nature located in the immediate vicinity of the mining operation.
- (88) "Recharge capacity" means the ability of the soils and underlying materials to allow precipitation and runoff to infiltrate and reach the zone of saturation.
 - (89) "Reclamation" is defined by KRS 350.010.
- (90) "Recreation land" means land used for public or private leisure-time use, including developed recreation facilities such as parks, camps, and amusement areas, as well as areas for less intensive uses such as hiking, canoeing, and other undeveloped recreational uses.
- (91) "Reference area" means a land unit maintained under appropriate management for the purpose of measuring vegetative ground cover, productivity, and plant species diversity that are produced naturally or by crop production methods approved by the cabinet.
- (92) "Refuse pile" means a surface deposit of coal mine waste that is not retained by an impounding structure and does not impound water, slurry, or other liquid or semiliquid material.
- (93) "Remining" means conducting surface coal mining and reclamation operations that affect previously mined areas.
- (94) "Residential land" means tracts employed for single and multiple-family housing, mobile home parks, and other residential lodgings.
 - (95) "Road":

- (a) Means a surface right-of-way for purposes of travel by land vehicles used in coal exploration or surface coal mining and reclamation operations. A road consists of the entire area within the right-of-way, including the roadbed, shoulders, parking and side area, approaches, structures, ditches, surface, and contiguous appendages necessary for the total structure. The term includes access and haul roads constructed, used, reconstructed, improved, or maintained for use in coal exploration or surface coal mining and reclamation operations, including use by coal hauling vehicles leading to transfer, processing, or storage areas; and
- (b) Does not mean pioneer or construction roadways used for part of the road construction procedure and promptly replaced by a road pursuant to 405 KAR Chapters 16 and 18 located in the identical right-of-way as the pioneer or construction roadway. The term also excludes any roadway within the immediate mining pit area.
- (96) "Safety factor" means the ratio of the available shear strength to the developed shear stress, or the ratio of the sum of the resisting forces to the sum of the loading or driving forces, as determined by accepted engineering practices.
 - (97) "SCS" means Soil Conservation Service.
 - (98) "Sedimentation pond" means a primary sediment control structure:
 - (a) Designed, constructed, or maintained pursuant to 405 KAR 16:090 or 405 KAR 18:090;
 - (b) That could include a barrier, dam, or excavated depression to:
 - 1. Slow water runoff; and
 - 2. Allow suspended solids to settle out; and
- (c) That does not include secondary sedimentation control structures, such as a straw dike, riprap, check dam, mulch, dugout, or other measure that reduces overland flow velocity, reduces runoff volume, or trap sediment, to the extent that the secondary sedimentation structure drains into a sedimentation pond.
- (99) "Shadow area" means the surface area overlying underground mine works and surface areas associated with auger and in situ mining.
- (100) "Significant, imminent environmental harm" means an adverse impact on land, air, or water resources including plant and animal life as further defined in this subsection.
 - (a) An environmental harm is imminent, if a condition, practice, or violation exists that:
 - 1. Is causing environmental harm; or
- 2. Could reasonably be expected to cause environmental harm at any time before the end of the reasonable abatement time that would be set by the cabinet's authorized agents pursuant to the provisions of KRS Chapter 350.
- (b) An environmental harm is significant if that harm is appreciable and not immediately reparable.
- (101) "Slope" means average inclination of a surface, measured from the horizontal, generally expressed as the ratio of a unit of vertical distance to a given number of units of horizontal distance (such as 1v:5h). It can also be expressed as a percent or in degrees.
- (102) "Slurry mining" means the hydraulic breakdown of subsurface coal with drill-hole equipment and the eduction of the resulting slurry to the surface for processing.
 - (103) "SMCRA" means Surface Mining Control and Reclamation Act, 30 U.S.C. Chapter 25.
- (104) "Soil horizons" means contrasting layers of soil parallel or nearly parallel to the land surface. Soil horizons are differentiated on the basis of field characteristics and laboratory data. The four (4) master soil horizons are:
- (a) "A horizon." The uppermost mineral layer, often called the surface soil. It is the part of the soil in which organic matter is most abundant, and leaching of soluble or suspended particles is typically the greatest;
- (b) "E horizon." The layer commonly near the surface below an A horizon and above a B horizon. An E horizon is most commonly differentiated from an overlying A horizon by lighter

color and generally has measurably less organic matter than the A horizon. An E horizon is most commonly differentiated from an underlying B horizon in the same sequum by color of higher value or lower chroma, by coarser texture, or by a combination of these properties;

- (c) "B horizon." The layer that typically is immediately beneath the E horizon and often called the subsoil. This middle layer commonly contains more clay, iron, or aluminum than the A, E, or C horizons; and
- (d) "C horizon." The deepest layer of soil profile. It consists of loose material or weathered rock that is relatively unaffected by biologic activity.
- (105) "Spoil" means overburden and other materials, excluding topsoil, coal mine waste, and mined coal, that are excavated during surface coal mining and reclamation operations.
- (106) "Stabilize" means to control movement of soil, spoil piles, or areas of disturbed earth by modifying the geometry of the mass, or by otherwise modifying physical or chemical properties, such as by providing a protective surface coating.
 - (107) "Steep slope" means any slope of more than twenty (20) degrees.
- (108) "Surety bond" means an indemnity agreement in a sum certain, payable to the cabinet and executed by the permittee, which is supported by the performance guarantee of a corporation licensed to do business as a surety in the Commonwealth of Kentucky.
 - (109) "Surface blasting operations":
 - (a) Means the on-site storage, transportation, and use of explosives in association with:
 - 1. A coal exploration operation;
 - 2. Surface mining activities; or
 - 3. A surface disturbance of underground mining activities; and
 - (b) Includes:
 - 1. Design of an individual blast;
 - 2. Implementation of a blast design;
 - 3. Initiation of a blast:
 - 4. Monitoring of an airblast and ground vibration; and
 - 5. Use of access control, warning and all-clear signals, and similar protective measures.
 - (110) "Surface coal mining and reclamation operations" is defined by KRS 350.010.
 - (111) "Surface coal mining operations" is defined by KRS 350.010.
- (112) "Surface mining activities" means those surface coal mining and reclamation operations incident to the extraction of coal from the earth by removing the materials over a coal seam before recovering the coal, by auger coal mining, by extraction of coal from coal refuse piles, or by recovery of coal from slurry ponds.
- (113) "Suspended solids" or nonfilterable residue, expressed as milligrams per liter, means organic or inorganic materials carried or held in suspension in water that are retained by a standard glass fiber filter in the procedure outlined by the U.S. EPA's regulations for waste water and analyses (40 C.F.R. 136).
- (114) "Temporary diversion" means a diversion of a stream or overland flow that is used during coal exploration or surface coal mining and reclamation operations and not approved by the cabinet to remain after reclamation as part of the approved postmining land use.
 - (115) "Ton" means 2000 pounds avoirdupois (.90718 metric ton).
 - (116) "Topsoil" means the A and E soil horizon layers of the four (4) master soil horizons.
- (117) "Toxic-forming materials" means earth materials or wastes that, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical conditions in soils or water that are detrimental to biota or uses of water.
- (118) "Toxic mine drainage" means water that is discharged from active or abandoned mines or other areas affected by coal exploration or surface coal mining and reclamation operations, which contains a substance that through chemical action is likely to kill, injure, or impair

biota commonly present in the area that might be exposed to it.

- (119) "Transfer, assignment, or sale of permit rights" means a change in ownership or other effective control over the right to conduct surface coal mining operations under a permit issued by the cabinet.
 - (120) "TRM" means Technical Reclamation Memorandum.
- (121) "Underground development waste" means waste coal, shale, claystone, siltstone, sandstone, limestone, or similar materials that are extracted from underground workings in connection with underground mining activities.
 - (122) "Underground mining activities" means a combination of:
- (a) Surface operations incident to underground extraction of coal or in situ processing, including construction, use, maintenance, and reclamation of roads, aboveground repair areas, storage areas, processing areas, and shipping areas; areas upon which are sited support facilities including hoist and ventilating ducts; areas utilized for the disposal and storage of waste; and areas on which materials incident to underground mining operations are placed; and
- (b) Underground operations such as underground construction, operation, and reclamation of shafts, adits, underground support facilities; in situ processing; and underground mining, hauling, storage, and blasting.
- (123) "Undeveloped land or no current use or land management" means land that is undeveloped or, if previously developed, land that has been allowed to return naturally to an undeveloped state or has been allowed to return to forest through natural succession.
 - (124) "U.S. EPA" means United States Environmental Protection Agency.
- (125) "Valley fill" means a fill structure consisting of any material other than coal waste and organic material that is placed in a valley where side slopes of the existing valley measured at the steepest point are greater than twenty (20) degrees or the average slope of the profile of the valley from the toe of the fill to the top of the fill is greater than ten (10) degrees.
 - (126) "Valuable environmental resources" means:
- (a) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by the Secretary of the Interior under the Endangered Species Act of 1973, as amended (16 U.S.C. Sec. 1531 et seq.), or those species or habitats protected by similar state statutes; and
- (b) Habitats of unusually high value for fish and wildlife, as determined by the cabinet in consultation with state and federal agencies with responsibilities for fish and wildlife.
- (127) "Water table" means the upper surface of a zone of saturation, where the body of groundwater is not confined by an overlying impermeable zone.
- (128) "Water transmitting zone" means a body of consolidated or unconsolidated rocks that, due to their greater primary or secondary permeability relative to the surrounding rocks, can reasonably be considered to function as a single hydraulic medium for the flow of groundwater.
- (129) "Wetland" means land that has a predominance of hydric soils and that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.
- (a) "Hydric soil" means soil that, in its undrained condition, is saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation.
 - (b) "Hydrophytic vegetation" means a plant growing in:
 - 1. Water; or
- 2. A substrate that is at least periodically deficient in oxygen during a growing season as a result of excessive water content. (18 Ky.R. 2475; Am. 2844; eff. 4-3-1992; 24 Ky.R. 704;

; eff. 6-10-1998; TAm eff. 8-9-2007; TAm eff. 7-6-2016; 44 Ky.R. 630, 1005, 1310; eff. 1-5-2018.)